

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-168567  
 (43)Date of publication of application : 23.06.1998

(51)Int.Cl. C23C 14/46  
 H01L 21/203

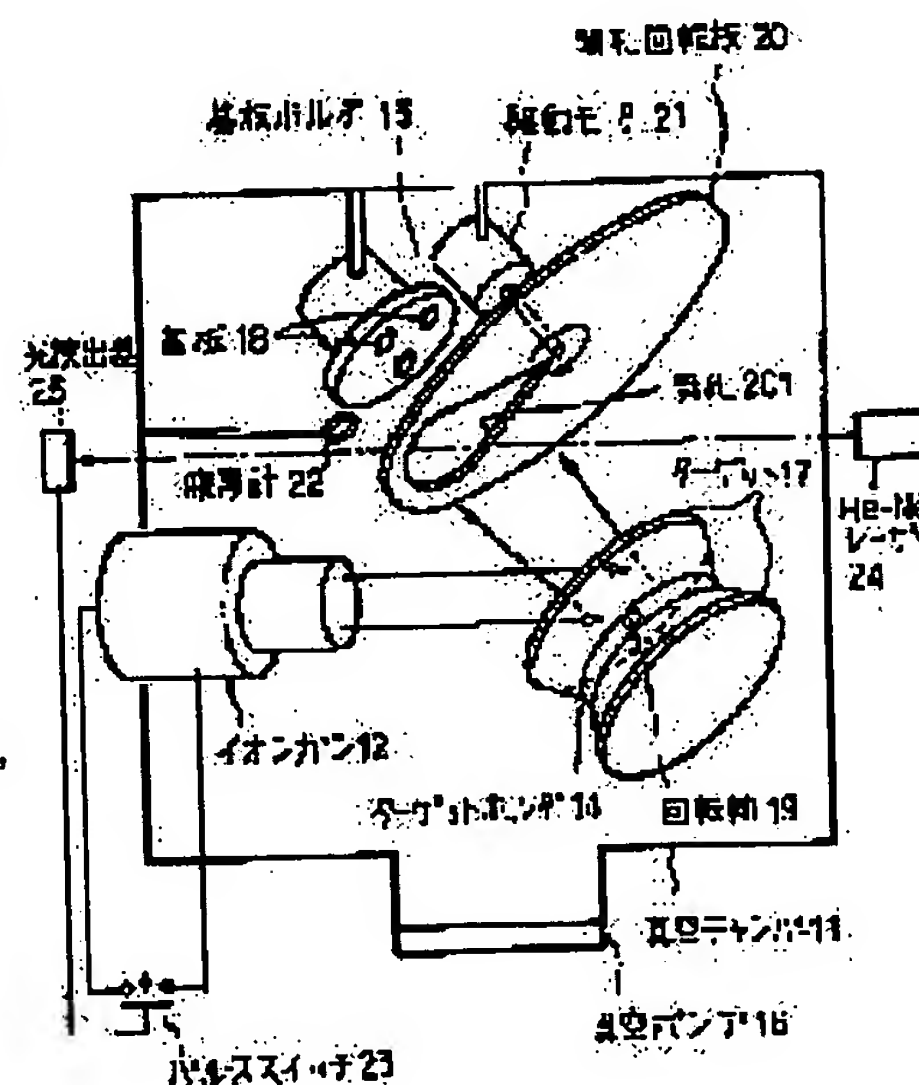
(21)Application number : 08-329515 (71)Applicant : JAPAN AVIATION ELECTRON IND LTD  
 (22)Date of filing : 10.12.1996 (72)Inventor : HIRAYAMA TOMOJI  
 ITO KAZUHIKO

## (54) ION BEAM SPUTTERING SYSTEM

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide an ion beam sputtering system in which only sputtering particles having a low energy of about several eV are selected from sputtering particles, and film is formed by these low energy sputtering particles.

**SOLUTION:** In an ion beam sputtering system composed of a vacuum chamber 11, an ion gun 12 set at the bottom part of the vacuum chamber, a target holder 14 supportingly fixed in the upper direction oppositely to the ion gun by a rotary shaft 19 inserted via the side wall of the vacuum chamber, a substrate holder 13 to which the substrate 18 in which this coating is to be formed is attached and detached, a shutter 20 set in the vicinity of the front part of the substrate holder and a vacuum pump 16 sucking and exhausting the inside of the vacuum chamber, low energy sputtering particles are selected to form thin film.



## LEGAL STATUS

[Date of request for examination] 17.09.1998

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 3360102

[Date of registration] 18.10.2002

[Number of appeal against examiner's decision of

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rejection]:

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]

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